

REMARKS

Reconsideration of the present invention in view of the above amendments and the following remarks is respectfully requested.

Status of the claims:

Claims 1-22 are pending and stand rejected. Claims 1-3, 12 and 21 have been cancelled. Claims 4-11, 13-20, and 22 have been amended herein. New claim 23 has been added.

Claims 1-22 are rejected under 35 U.S.C. § 112, ¶ 2 as being indefinite.

Claims 1 and 17-19 are rejected under 35 U.S.C. § 102(b) as being unpatentable over U. S. Pat. No. 3,979,317 ("Angelini I").

Claims 1, 10, 13, 15 and 17-19 are rejected under 35 U.S.C. § 102(b) as being unpatentable over U. S. Pat. No. 4,054,534 ("Angelini II").

Claims 6-7 are rejected under 35 U.S.C. § 102(b), or alternatively under § 103(a), as being unpatentable over Angelini I and II.

Claims 1-2, 10, 13, and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U. S. Pat. No. 5,650,543 ("Medina") in view of U. S. Pat. No. 4,931,201 ("Julemont").

Claims 1, 3-11, 12, 13, 15, and 17-22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U. S. Pat. No. 6,017,822 ("Pederson") in view of Julemont.

Claims 10, 13, and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Angelini I in view of Julemont.

Claim 14 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Angelini I in view of Julemont.

Claim 16 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Angelini I and II, Medina, or Pederson in view of U. S. Pat. No. 4,847,089 ("Kramer").

These issues will be treated in turn below.

The Claim Amendments:

Claim 20 was amended to recite that the aqueous solution "consists essentially" of high purity water and from 0.001 % to 0.5% by weight of an acetylenic diol surface active agent. Support for this limitation is provided in the specification, for example, at pg. 3 lines 21-24; and pg. 6, lines 20-25 through pg. 7, lines 1-8. No new matter has been entered in making these amendments.

Claims 4-11 and 13-19 have been amended to refer to newly added claim 23 rather than cancelled claim 1 and to change certain claim terminology such as "surface active agent" to "acetylenic diol" to provide the requisite antecedent basis. No new matter has been entered in making these amendments.

Applicants respectfully request that the Examiner enter the above claim amendments.

Presentation of New Claims:

In the present office action, new claim 23 has been added. Claim 23 is being presented at this time to more completely cover a particular aspect of Applicants' invention. Further, it is submitted that new claim 23 raises no new issues and does not require the Examiner to conduct an additional search, since the claim merely clarifies the subject matter already presented.

Newly added claim 23 recites a cleaning wipe, having a low volatile organic chemical content in the range of 0.001% to 0.5% by weight and a low nonvolatile residue property of at

least 1×10^{-4} torr at 25°C, and that consists essentially of water and from 0.001 to 0.5% by weight of an acetylenic diol. Support for these claim limitations are found, for example, at pg. 3 lines 21-24; pg. 4, lines 12-18; pg. 5, lines 6-7; and pg. 6, lines 3-6; pg. 6, lines 20-25 through pg. 7, lines 1-8.

Applicants respectfully request that the Examiner enter the above new claim.

Rejection Under 35 U.S.C. §112, ¶ 2

The Examiner has rejected claims 1-22 because the recitation “effective” in claims 1 and 20, as it related to the surface active agent, was unclear. Applicants has cancelled claim 1 and amended claim 20 to remove the term “effective”. Accordingly, withdrawal of the §112, ¶2 rejections is respectfully requested.

The §102(b) Rejections:

Applicant traverses the Section 102 rejections in view of Angelini I and II. Anticipation under Section 102(b) requires that each claim limitation of a claim be found in a single reference or the rejection falls. Further, the transitional phrase “consisting essentially of” limits the scope of the claim to the specified materials and those “that do not materially affect basic and novel characteristic(s)” of the claimed invention. MPEP § 2111.03 (citing *In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976) (emphasis in original)). Applicant asserts that Angelini I and II do not meet the requirement for anticipation for newly Claim 23 and its dependent claims.

Angelini I and II, by contrast, disclose solutions for cleaning components, such as lenses and mirrors, in copy and electrophotographic equipment. Specifically, Angelini I describes a solution that contains from 30-90 parts by volume of a lower alcohol per 70-10

parts by volume water and from 0.1 to 50 parts by volume per 100 parts alcohol/water solution of a surfactant, e.g., 3, 5-dimethyl-1-hexyn-3-ol (col. 4, lines 7-27 and claim 1). Angelini II describes a solution that contains from 30-95 by volume of a lower alcohol per 70-5 parts by volume water, from 0.1 to 10 parts by volume per 100 parts alcohol/water solution of a surfactant, e.g., 3, 5-dimethyl-1-hexyn-3-ol, and 0.1 to 5 parts by volume per 100 parts alcohol/water solution of ammonia (col. 3, lines 49-69 through col. 4, lines 1-20). By contrast, the "consisting essentially of" language in Applicants' claim 23 precludes the addition of a lower alcohol and/or ammonia. Further, since the solutions in Angelini I and II have a volatile organic chemical content higher than 0.001% to 0.5% by virtue of the amount of the lower alcohol contained therein, there can be no anticipation by Angelini I and II. Accordingly, reconsideration and withdrawal of the rejection of the claims under 35 U.S.C. § 102(b) over Angelini I and II is respectfully requested.

Claims 6 and 7 were also rejected as anticipated under 102(b), or alternatively unpatentable under 103(b), over Angelini I and II because, according to the Examiner, the low vapor pressure was an inherent characteristic of the Angelini compositions. In response, it is respectfully suggested that the rejection becomes moot because claims 6 and 7, which now depend upon newly added claim 23, precludes the addition of a lower alcohol in the aqueous solution. Thus, there can be no anticipation.

Similarly, the obviousness rejection of Claims 6 and 7 must also be withdrawn. Angelini I and II is relevant to show that large levels of alcohol are necessary to effect cleaning in the removal of toners and other contaminants in electrophotographic equipment. Applicants have found that one can eliminate the lower alcohol and reduce the level of acetylenic diol near the lower range of Angelini I and II and generate an effective wipe while eliminating essentially all of the volatile organic content. That surprising effect is not

disclosed nor taught in either Angelini I or II. Accordingly, the rejection of claims 6 and 7 as being anticipated, and/or obvious, in view of Angelini I or II must also be withdrawn.

The §103(a) Rejections:

Applicant traverses the rejection of Claims 1-2, 10, 13, and 15 under Section 103(a) over Medina in view of Julemont. Claims 1 and 2 have been cancelled and their rejection is moot.

Medina was cited as disclosing ethoxylated acetylenic diols and Julemont discloses pads impregnated with cleaning solutions.

Neither Medina nor Julemont teach or suggest the claimed invention. While Medina discloses ethoxylated acetylenic diols, Medina fails to teach or disclose the use of an acetylenic diol in an aqueous solution that wets a wipe substrate to provide a cleaning wipe. Julemont does not provide the missing teaching. Instead, Julemont discloses household cleaning pads that are impregnated with a solution in the form of a microemulsion comprised of water, surfactant, mineral salts, glycol ethers, and other additives. Even if one were to employ the Medina surfactant in the Julemont formulation, that would not establish the presently claimed wipes for cleaning the surfaces in an electronic clean room which would have a low volatile organic chemical content and a low nonvolatile residue property. There is nothing in the form of a teaching in either reference to formulate a cleaning composition of the type presently claimed for a clean room wipe. Therefore, the rejection of Claims 10, 13, and 15, which depend from Claim 23, has been overcome and this rejection should be removed.

Applicant traverses the rejection of Claims 1, 3-11, 12, 13, 15, and 17-22 under Section 103(a) over Pedersen in view of Julemont. Claims 1, 3, 12 and 21 have been

cancelled and their rejection is moot. Like the combination of Medina with Julemont, the combination of Pederson with Julemont fails to teach or suggest the claimed invention. Pedersen discloses cleaning solutions containing a sulfonate ester surfactant, e.g., an aromatic sulfonate, an ethyoxylated glycol surfactant, and an acetylenic diol surfactant such as 2,4,7,9-tetramethyl-5-decyne-4,7-diol and 3,6-dimethyl-4-octyn-3,6-diol. The combination of Pedersen with Julemont would not have provided the cleaning wipe now claimed in newly added Claim 23 and amended Claim 20. Since the cleaning solution in Julemont contains mineral salts and the cleaning solution in Pedersen contains sulfonates, both of which would affect at least one of the basic and novel characteristics required of the cleaning wipes claimed by Applicants, the rejection of Claims 4-11, 13, 15, and 17-22 should be removed.

Applicants traverse the rejections of dependent Claims 10, 13 and 15 over Angelini I in view of Julemont; claim 14 over Angelini I; and claim 16 over Angelini I, Angelini II, Medina or Pederson in view of Kramer. As mentioned above, none of the cited references teach or suggest at least one of the required elements of the cleaning wipe in Applicants' newly added claim 23, such as, for example, a low volatile organic chemical content and a low nonvolatile residue property. Further, the addition of other additives within the cleaning solutions disclosed in the cited references such as, for example, lower alcohols in Angelini I and II, mineral salts in Julemont, and sulfonates in Pederson would effect at least one of the basic and novel characteristics required in Applicants' claimed invention. Thus, the combination of one or all of the aforementioned references with Kramer would not have provided Applicants' claimed invention. Therefore, the rejection of the Claims 10, 13, 14, 15 and 16 should be removed.

SUMMARY

For at least the reasons set forth above, it is respectfully submitted that the above-identified application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are respectfully requested.

Should the Examiner believe that anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned Attorney at the telephone number listed below.

Respectfully submitted,



Rosaleen P. Morris-Oskanian
Attorney of Record
Reg. No. 47,321

Air Products and Chemicals, Inc.
7201 Hamilton Boulevard
Allentown, PA 18195-1501
(610) 481-8169

attachments: Petition for a Two Month Extension of Time
PTO Form SB/22